Massachusetts HIV/AIDS Data Fact Sheet

Women at Risk of HIV Infection

December 2004

Introduction

Although HIV/AIDS was first discovered among men who have sex with men, the proportion of cases among women has increased over time. Currently, 30% of people recently diagnosed with HIV infection and 28% of people living with HIV/AIDS in Massachusetts are women.

General Statistics:

- Within the years 2001 to 2003, 814 women were diagnosed with HIV infection, accounting for 30% of all diagnoses in Massachusetts.
- As of July 1, 2004, there were 4,167 women living with HIV/AIDS, accounting for 28% of people living with HIV/AIDS in Massachusetts.

Regional Distribution:

- Within Health Service Regions (HSR), the Central region has the largest proportion of women among people diagnosed with HIV infection from 2001 to 2003 at 39%. Among people living with HIV/AIDS, the Central and Western regions have the largest proportion of women at 39%.

Among cities with over 20 people diagnosed with HIV infection within the three year period 2001 to 2003, the following have at least 40% of diagnoses among women:

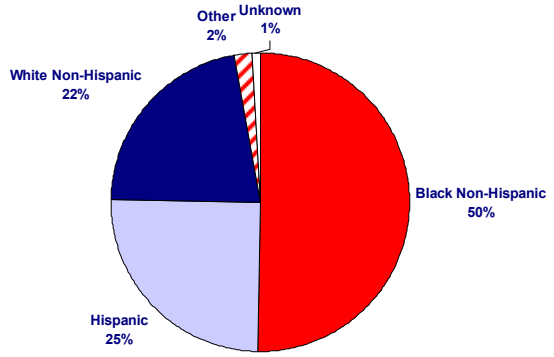
Brockton	49%	(N=45)
Malden	47%	(N=21)
Lynn	46%	(N=28)
Lawrence	45%	(N=22)
New Bedford	44%	(N=35)
Framingham	43%	(N=13)
Worcester	43%	(N=62)
Lowell	41%	(N=35)
Holyoke	40%	(N=19)

NOTE: N *indicates number of women diagnosed with HIV infection.*

Race and Ethnicity:

- Among recent HIV infection diagnoses, 50% of women are black, compared to 26% of men. Similarly, among people living with HIV/AIDS, 39% of women are black, compared to 22% of men.

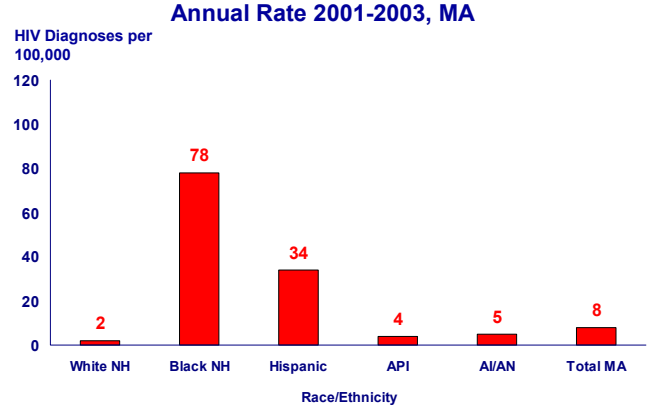
Figure 1 Women Diagnosed with HIV infection from 2001-2003 by Race/Ethnicity: Massachusetts



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/04

- ***Disparate Impact:*** The age-adjusted average annual rate of HIV diagnosis from 2001 to 2003 among black females (78 per 100,000) is 39 times greater, and among Hispanic females (34 per 100,000) is 17 times greater than for white females (2 per 100,000).

Figure 2 Age-Adjusted Rate of HIV Diagnosis per 100,000[1] Population *Among Females* by Race/Ethnicity: Average Annual Rate 2001-2003, MA



1 Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/04

- Similarly, the age-adjusted prevalence rate of HIV/AIDS among black females (941 per 100,000) is 20 times greater, and among Hispanic females (630 per 100,000) is 13 times greater than for white females (47 per 100,000).

Place of Birth:

- Forty percent of females diagnosed with HIV infection from 2001 to 2003 were born outside the US, compared to 24% of males. Similarly, 24% of females living with HIV/AIDS were born outside the US, compared to 14% of males.

Exposure Mode:

- Exposure mode among women diagnosed with HIV infection within the years 2001 to 2003:
  - 29% (N=238) heterosexual sex
  - 16% (N=133) injection drug use
  - less than 1% (N=4) other modes (including blood/blood products and pediatric)
  - 42% (N=342) heterosexual sex with partners with unknown risk and HIV status (presumed heterosexual)[1]
  - 12% (N=97) no identified risk
- Exposure mode among women living with HIV/AIDS:
  - 34% (N=1,407) injection drug use
  - 33% (N=1,392) heterosexual sex
  - 2% (N=91) other modes (including blood/ blood products and pediatric).
  - 26% (N=1,071) heterosexual sex with partners with unknown risk and HIV status (presumed heterosexual)[1]
  - 5% (N=206) have no identified risk.

Exposure Mode and Race/Ethnicity:

- While injection drug use is the predominant mode of exposure among white women (accounts for 34% of women recently diagnosed and 52% of women living with HIV/AIDS), heterosexual sex with partners with unknown risk and HIV status (presumed heterosexual)[1] is the predominant exposure among black women (accounts for 56% of women recently diagnosed and 41% of women living with HIV/AIDS) and heterosexual sex is the predominant exposure among Hispanic women (accounts for 41% of women recently diagnosed and 44% of women living with HIV/AIDS).

Age at HIV Diagnosis:

A larger proportion of women than men are diagnosed with HIV infection in younger age groups.

- Ten percent of women diagnosed with HIV infection within the years 2001 to 2003 were diagnosed during adolescence (13-24 yrs), as compared to 5% of men, and 14% were diagnosed between the ages of 25 and 29, as compared to 10% of men.

Women at Risk of HIV infection:

Behavioral Risk Factors: According to local behavioral surveys, women in Massachusetts are engaging in behaviors that put them at risk for HIV infection.

- Among 1,059 sexually active female respondents (age 18-64) to the 2002 Massachusetts Behavioral Risk Factor Surveillance Survey, 78% (N=826) did not use a condom at their last sexual encounter. Of these women, the main reason reported for not using a condom was being in a monogamous relationship (58%) followed by using another form of birth control (26%).
- Among 1,792 school aged female respondents to the 2003 Massachusetts Youth Risk Behavior Survey (MYRBS), 41% reported ever having sex, 2% reported having sexual intercourse before age 13, and 9% reported having 4 or more lifetime sexual partners. Among females who reported sexual intercourse in the 3 months before the survey, 55% reported condom use at last intercourse and 18% reported substance use at last intercourse.
- The proportion of school aged females reporting that they ever had sex decreased from 46% in 1993 to 41% in 2003.
- The proportion of school aged female respondents to the MYRBS that reported condom use at last intercourse increased from 47% in 1993 to 55% in 2003.

HIV Related Morbidity and Mortality Among Women:

AIDS Diagnoses:

- The proportion of new AIDS diagnoses that are among women increased from 22% in 1993 to 32% in 2003.

Mortality with AIDS:

- The proportion of deaths among people diagnosed with AIDS that were women rose from 16% in 1993 to 30% in 2003.

[1] ***Note for interpretation of presumed heterosexual category:*** *The category of "presumed heterosexual" is used in Massachusetts to re-assign people who are reported with no identified risk but who are known not to have reported any other risks except heterosexual sex with a partner of unknown HIV status or risk. Massachusetts uses this category to distinguish these cases from other undetermined cases about which we know less. Nationally, the Centers for Disease Control and Prevention categorizes "presumed heterosexual" cases as "no identified risk." Nationally, the Centers for Disease Control and Prevention categorizes these cases as "no identified risk." As such, comparisons of the presumed heterosexual category cannot be made to national data. Caution should be used in interpreting data for presumed heterosexual as it is still not clear what the exposure risk is for people in this category. Although a person may not report other risk behaviors such as injection drug use or male-to-male sex to his/her health care provider, it does not necessarily mean that he/she has not engaged in them. There are many barriers to disclosing HIV risk behaviors in the health care setting such as a tenuous patient-provider relationship or the stigma associated with drug use and male-to-male sex.*

Data Sources:

HIV/AIDS Case Data: MDPH HIV/AIDS Surveillance Program, Data as of July 1, 2004

BRFSS Data: Massachusetts Department of Public Health, Bureau of Center for Health Information, Statistics, Research and Evaluation, Behavioral Risk Factor Surveillance System

YRBS Data: Massachusetts Department of Education, 2003 Youth Risk Behavior Survey Results

Additional References of Interest:

Ickovics JR, Beren SE, Grigorenko EL, Morrill AC, Druley JA, Rodin J. Pathways of Risk: Race, Social Class, Stress, and Coping as Factors Predicting Heterosexual Risk Behaviors for HIV Among Women. *AIDS and Behavior*. 2002:6:339-350.

Soler H, Quadagno D, Sly D, Riehman K, Eberstein I, Harrison D. Relationship Dynamics, Ethnicity and Condom Use among Low-Income Women. *Family Planning Perspectives*. 2000;32:82-88,101.

Pulerwitz J, Amaro H, De Jong W, Gortmaker SL, Rudd R. Relationship Power, Condom Use and HIV Risk Among Women in the USA. *AIDS Care*. 2002;14:789-800.

For more detailed information and a description of data limitations please see "HIV/AIDS in Massachusetts: An Epidemiologic Profile", available online at www.mass.gov/dph/aids